

REMARKS/ARGUMENTS

An Office Action was mailed on May 17, 2004. Claims 22 and 41-49 are pending, of which claim 22 is the only independent claim.

Therein, claims 22 and 41-49 stand rejected under 35 U.S.C 102(e) as being anticipated by U.S. Patent No. 6,336,365 to Blackadar et al. or, in the alternative, under 35 U.S.C 103(a) as being unpatentable over Blackadar et al. in view of the admitted prior art. The rejections are respectfully traversed.

Further, the examiner indicated that Blackadar et al. discloses two capacitors connected to each other at plane-symmetrical positions since Blackadar et al. show multilayer capacitors mounted on substantially symmetrical positions on a circuit board in Fig. 6A-6C and 9 and Blackadar et al. also show a multilayer capacitor connected to a pair of lands with one land of the pair of lands being connected to the other substantially plane-symmetrical land of the pair of lands through a conductor through hole in Fig. 7.

By way of review, Blackadar et al. discloses an accelerometer for detecting a signal responsive to flexing of a flexible circuit board 302 by using one or more transducers 404, 404a and 404b with a piezoceramic dielectric therein in order to detect the acceleration of an object.

Further, Blackadar et al. also show a pair of transducers 404a and 404b mounted on apposite sides of a circuit board 802 so that the transducers 404a and

404b can generate a differential signal since the bending of the circuit board 802 causes one of the transducers 404a and 404b to be stretched while the other transducer is compressed.

In this case, since a voltage generated by the transducer 404a which is subjected to tension forces is different from another voltage generated by the opposite transducer 404b which is subjected to compression forces, it is natural that the transducers 404a and 404b may not be connected to each other.

Further, even if the transducers 404a and 404b of Blackadar et al. are connected to each other, it is required that a first signal generated by the transducer 404a does not cancel out a second signal generated by the transducer 404b and vice versa in order to obtain a sufficient signal for monitoring the acceleration of the object. That is, if the transducers 404a and 404b are connected to each other, the first signal and the second signal are mixed together. Accordingly, if the first signal and the second signal cancel each other, a sufficient signal for monitoring the acceleration of the object may not be obtained in the accelerometer of Blackadar et al. Therefore, a mounting structure in which two signals generated by the transducers 404a and 404b does not cancel each other is required in the accelerometer of Blackadar et al.

In contrast, the present invention employs two capacitors connected to each other to cancel out the vibrations generated from the capacitors. That is, a mounting structure where two capacitors cancel out the vibrations each other is indispensable in claim 22 of the present invention.

Specifically, Blackadar et al. are totally different from the present invention in that:

1) Blackadar et al. disclose that transducers 404a and 404b may not be connected with each other since a voltage generated by tension forces applied to one of the transducers 404a and 404b may be different from another voltage generated by compression forces applied to the other opposite transducer 404b, while the present invention employs two capacitors connected to each other to cancel out vibrations generated from the capacitors; and even if the transducers 404a and 404b of Blackadar et al. are connected to each other

2) the accelerometer of Blackadar et al. requires a mounting structure in which two signals generated by the transducers 404a and 404b does not cancel each other in order to obtain a sufficient signal for monitoring the acceleration of the object, while the present invention employs a mounting structure where two capacitors cancel out the vibrations each other.

Accordingly, it is understood that the property to cancel the vibrations generated from two capacitors is not inherent in Blackadar et al.

Therefore, it is respectively submitted that Blackadar et al. are conceptionally and materially different from the present invention and that none of the features defined in the pending claims are not disclosed, taught or even implied in Blackadar et al.

Accordingly, it is respectfully submitted that the Examiner's hindsight combination of Blackadar et al. with a prior art is entirely improper in the absence of any suggestion, teaching or motivation given in any of the prior art references to do so,

and inasmuch as one skilled in the art would have no reason to make such combination.

Furthermore, even assuming, arguendo, that such combination were proper, such combination still cannot render the present invention obvious because neither Balckador et al. nor the prior art disclose or even imply the present invention. Accordingly, even if every single disclosure contained in each of the references is selectively chosen and stacked together against the present invention, such combination cannot possibly suggest to an ordinary person skilled in the art the inventive features of the present invention.

Accordingly, it is respectfully submitted that each of the claim 22 defines an unobvious and patentable invention over and above the prior art references, including Blackadar et al. and the prior art collectively or individually, and is, therefore, allowable.

It is also believed that claims 41-49 directly depending on claim 22 are allowable for the same reasons indicated with respect to the amended claim 22 further because of the additional features recited therein which, when taken alone and/or in combination with the features recited in the amended claim 22 remove the invention defined therein further from the disclosures made in the prior art references.

CONCLUSION

Applicant believes that this is a full and complete response to the Final Office Action. For the reasons discussed above, applicant now respectfully submits that all

of the pending claims are in complete condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn; and that claims 22 and 41-49 be allowed in their present form.

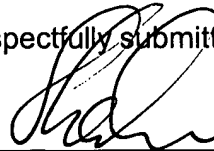
Should the Examiner require or consider it advisable that the specification, claims an/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment and the case be passed to issue.

All dependent claims are patentable for at least the same reasons as the independent claims from which they depend.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



Hassan A. Shakir
Reg. No. 53,922
(212) 940.6489

CUSTOMER NUMBER 026304

Docket No.: 3246/FLK/Div. Of 2798 (032878-87623)

HAS:fd